

 Phone:
 888-558-5227

 651-644-8424

 Fax:
 888-558-7329

 Email:
 getinfo@lktlabs.com

 Web:
 lktlabs.com

## **Product Information**

Product ID B3278

CAS No. 58-85-5

Chemical Name Hexahydro-2-oxo-1H-thieno[3,4-d]imidazole-4-pentanoic acid

Synonym Biodermatin, Coenzyme R, Vitamin H

 Formula
 C10H16N2O3S

 Formula Wt.
 244.31

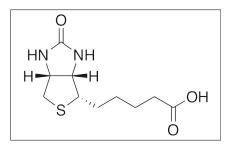
 Melting Point
 232-233°C

 Purity
 ≥98%

 Solubility
 Soluble in water (0.2 mg/mL). Very soluble in hot water and dilute alkali. Insoluble in common organic solvents. DMSO to 49 mg/mL. 2 M NaOH to 50 mg/mL.

 Store Temp
 Ambient

 Ship Temp
 Ambient



## Bulk quanitites available upon request

Size
500 mg
1 g
5 g
10 g

Description Biotin is a water-soluble B vitamin (vitamin B7) that may be found in many foods but is also administered as a dietary supplement. Biotin is a coenzyme involved in the synthesis of fatty acids, isoleucine, and valine; it also plays a role in gluconeogenesis. Biotin may be found attached to lysine residues on histones, modulating genetic regulation. Biotin conjugates are used to study the binding of small, bioactive molecules to endogenous substrates.

**References** Lietzan AD, St Maurice M. Functionally diverse biotin-dependent enzymes with oxaloacetate decarboxylase activity. Arch Biochem Biophys. 2014 Feb 15;544:75-86. PMID: 24184447.

Trippier PC. Synthetic strategies for the biotinylation of bioactive small molecules. ChemMedChem. 2013 Feb;8(2):190-203. PMID: 23303486.

Zempleni J, Wijeratne SS, Hassan YI. Biotin. Biofactors. 2009 Jan-Feb;35(1):36-46. PMID: 19319844.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.